N.A.T.U.R.E

(NATURALLY A TERRIBLE URCHIN RUINS EVERYTHING)

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31st January 2020

Revision History

- Daniel Cutajar - 17th January 2020
- Daniel Cutajar - 27th January 2020
- Daniel Cutajar - 29th January 2020
- Daniel Cutajar - 30th January 2020
- Michela Mifsud - 31st January 2020
- Daniel Cutajar - 30th January 2020

Game Goals

The game's continuous goal is to seek the next power up. The player unlocks powers as they go which triggers abilities that allow them to move on to their next target, creating a cycle of progression.

The overarching goal is to reach the end of each world edge and retrieve the artifacts. The Breath of Life, The Eternal Flame, The Tree of Wisdom and the Mastered Tides

Story Overview

The Elementalist (player) spawns into the Hub and has to navigate their way through the world they were placed in, not really knowing why they were created. As they make their way through the four areas, they realise that they have a task to carry out.

Each area has an objective:

- **Fire:** Restore the Eternal Flame

- **Air:** Bring back the Breath of Life

- **Earth:** Repair the Tree of Wisdom

- **Water:** Regain Control of the Tides

After the final objective is carried out, the Elementalist comes face to face with Mother Nature, and realises that it was her who destroyed nature, and her who created him to restore it, just because she didn't have anything better to do. In a final battle against Mother Nature, everything rests on the Elementalist's shoulders to keep nature safe from the very being that was supposed to protect it.

Game Controls

The player will make use of the arrow keys for left and right movement as well as the space bar for jumping and vertical movement.

Additionally the core swapping mechanic will be triggered through the WASD key to change the active element with the elements elemental attacks and terrain abilities being triggered through the X and C keys respectively.
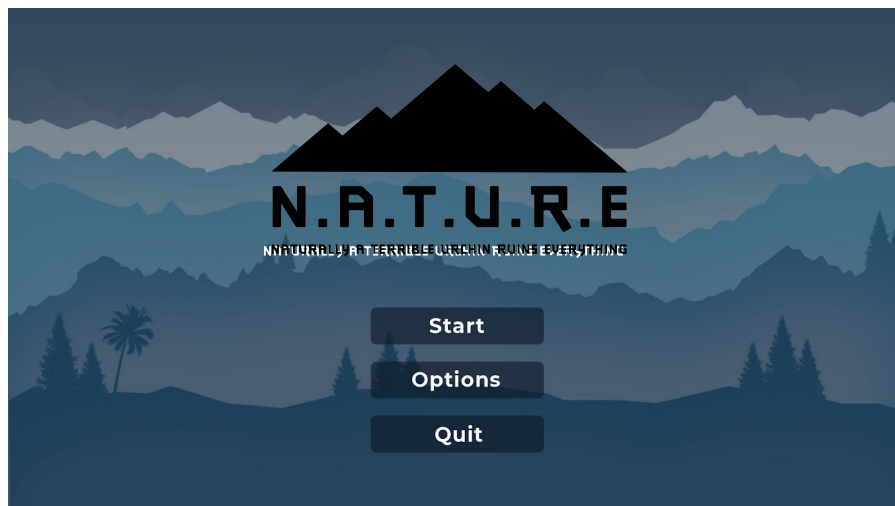
Saving - The saving is triggered by the (KEY) key when in the presence of a saving podium.

Technological Requirements

Game Tools - Research Game Tools + Mechanics (Programmer/Designer/Hard Coded/Scripted)

Design Tools - Grid System for Platforms (hidden with natural asset overlay on top)

Title Screen

The title screen only allows the player to start their game and opens on their last save point, if there isn't one the starting screen will load.

The player options include:

Volume settings - allowing the player to change the audio output percentage
Fullscreen settings - allowing the player to toggle fullscreen and windowed mode
Resolution settings - allowing the player to change between different resolutions
Graphic settings - allowing the player to change the graphics between high and low

Game flowchart
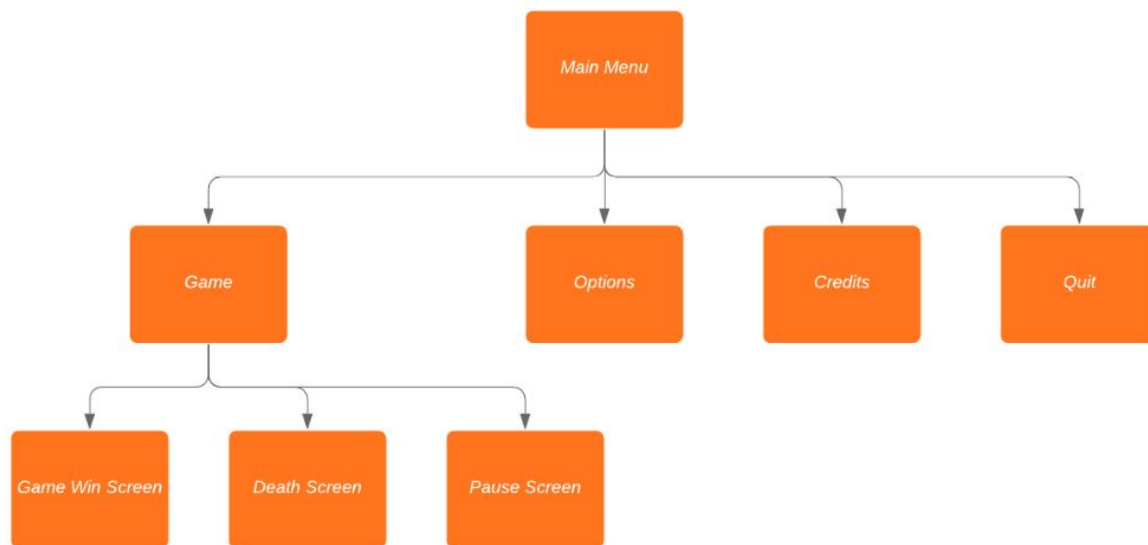
Game Camera

2D camera locked onto the player. There isn't a one to one relationship with the player, meaning the player can move a tiny bit without the camera moving. There are also camera limits in certain scenes where the camera can't go past a certain distance, like when the character is at the far edge of the map

HUD System

The HUD will display the 4 elements that the player has control over. (The active element will be in full colour while the other elements will be greyed out

The Abilities will also be displayed showing the unlocked abilities for the active element in full colour and the yet to be unlocked greyed out. If an ability is used an animation will play making said ability unusable with a visible cooldown.

A possible future implementation is a minimap which would display the areas the player has explored and tracks the user's position in the world.

Player Characters
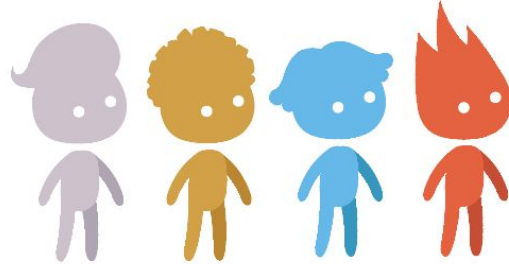
The character is an avatar able to switch between the 4 elements. Not much is known about their existence other than they were created by Mother Nature to retrieve the four artifacts from the four corners of the world. They are the only being capable due to their ability to adapt to all natural situations and advance throughout the different regions.

Player Metrics

Grid System - Player is one block size, the game is adjusted to cater to a one block sized movement. All tiles in game will be one block size but intractable

Player Skills

Fire Mechanics

- Fireball – The player will shoot a 5 tiles fireball every (x) seconds that deals damage to an enemy.
- Flame Dash – The player will dash in the direction faced ignoring gravity.

Water Mechanics

- Freeze Breath – The player will freeze 5 tiles in front of him. This ability effects both terrain and enemies. The terrain will turn into ice while enemies will be frozen for (x) seconds.
- Water Bubble – The player will become immune for (x) seconds.

Air Mechanics

- Ghost – The player will turn into a ghost for (x) seconds. While the player is a ghost, the enemies will not be able to detect the player's location.
- Float – The player will slowly float up a long distance.

Earth Mechanics

- · Ground Pound – The player pounds the ground 5 tiles in front of him and breaks breakable terrain. Ground Pound also stuns enemies for (x) seconds.
- · Dig Through Soil – The player will be able to dig through to soil and avoid obstacles.

State Modifiers

- Fire Resistance (Passive) – The player can walk through fire and does not take damage from fire.
- Swim (Passive) – The player will be able to swim through streams.
- Wall Jump (Passive) – The player now has the ability to wall jump. Once the player lands on a wall, he can jump again to the other direction.
- Strength (Passive) – The player has enough strength to move obstacles such as boulders.

Lives/Death

The player only has one life and operates on an instant death condition. This means should the player do anything incorrect that will cause the character to take damage, the game over screen will be prompted.

The items that can cause instant death are as follows: Enemies making contact with the player either physically or via ranged attacks, hitting a hazardous object such as spikes.

Once these conditions are met a screen will appear prompting the user to either go back to menu or continue from their last checkpoint.
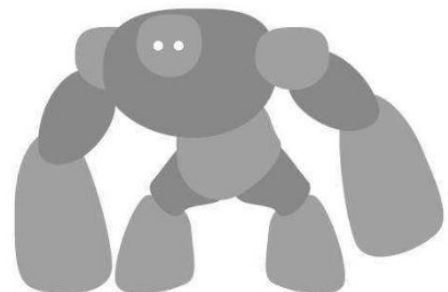
Checkpoints

The checkpoints are found in random areas scattered throughout the map. They are rooms which contain extra elements the user cannot pick up as a part of the red herring. Once the character loses they are sent back to their last checkpoint save, the intent is for users to save regularly.

Major Characters in Story

The other major character, besides the protagonist, is Mother Nature who is a goddess with the body of a woman and the head of an urchin. She is responsible for sending the hero on their journey throughout the world to retrieve the artefacts.

Besides her there are the four protectors of the artefacts. They realise the hero's worth and pass the artefact onto them when the final areas are reached. There is the Unicorn for air, Golem for earth, Dragon for Fire and Merman for water.

Game Progression Outline

Location	HUB	Fire	Earth	Water	Air
Story Objectives	Get the 4 artefacts to open the final door	Get the Eternal Flame	Get the Tree of Wisdom	Get the Mastered Tides	Get the Breath of Life
Game Objectives	Enter Fire area and unlock Earth	Unlock the Ground Pound Ability	Unlock the Ghost Ability	Take Path 1 and unlock Dig Ability	Unlock the Frost Breath Ability
	Enter Earth area and unlock Water	Take Path 1 and unlock Bubble Ability	Take Path 1 and unlock High Jump Ability		Take Path 1 and unlock Dash Ability
	Enter Water area and unlock Air	Take Path 2 and find the Eternal Flame	Take Path 2 and find the Tree of Wisdom	Take Path 2 and find the Mastered Tides	Take Path 2 and find the Breath of Life
	Enter Air area and unlock Fireball Ability				
Obstacles	Lava Pushable Rocks Water Spikes Diggable Tiles Breakable Walls	Lava Spikes Vines Water Pushable Rocks Breakable Walls	Pushable Rocks Breakable Walls Diggable Tiles Spikes Vines	Water Spikes Diggable Tiles Pushable Rocks	Invisible Tiles Wall Jump Ghosting enemies Breakable Walls Spikes
Enemies	Clouds Butterflies	Salamander Fire Ant Phoenix	Dune Bug Mole Caterpillar	Jellyfish Red Herring Blowfish	Clouds Butterflies Bird
Power-Ups/Rewards	Fire Element Earth Element Water Element Air Element Fireball Coins	Ground Pound Bubble Eternal Flame Coins	Ghost High Jump Tree of Wisdom Coins	Dig Mastered Tides Coins	Frost Breath Dash Breath of Life Coins

Universal Game Mechanics

	Saving Podium Standing here will allow the user to press a key and save their game		Pushable Rocks These rocks can be pushed by the earth element and are used for puzzles and blocking paths
	Invisible Tiles Tiles are are touchable but not seeable unless airs ghost is active. Used for hidden passages		Breakable Walls These walls will break when in the vicinity of the earth elements ground pound. Used for blocking paths
	Diggable Tiles These tiles are used for quick transportation later in the game via earths dig ability		Water Tiles These tiles kill all elements except water element which can swim through them.
	Vines Used to block paths and can only be destroyed by the fire elements fireball ability.		Fire Pillar Used to block paths and for platform difficulty. Fire element can pass through whilst all other elements die on contact.
	Spikes Used as to make platform levels more difficult. Kill all elements.		Coins Found throughout the map as a collectible item.

## Game Levels (Sub divide the metroidvania)

Center
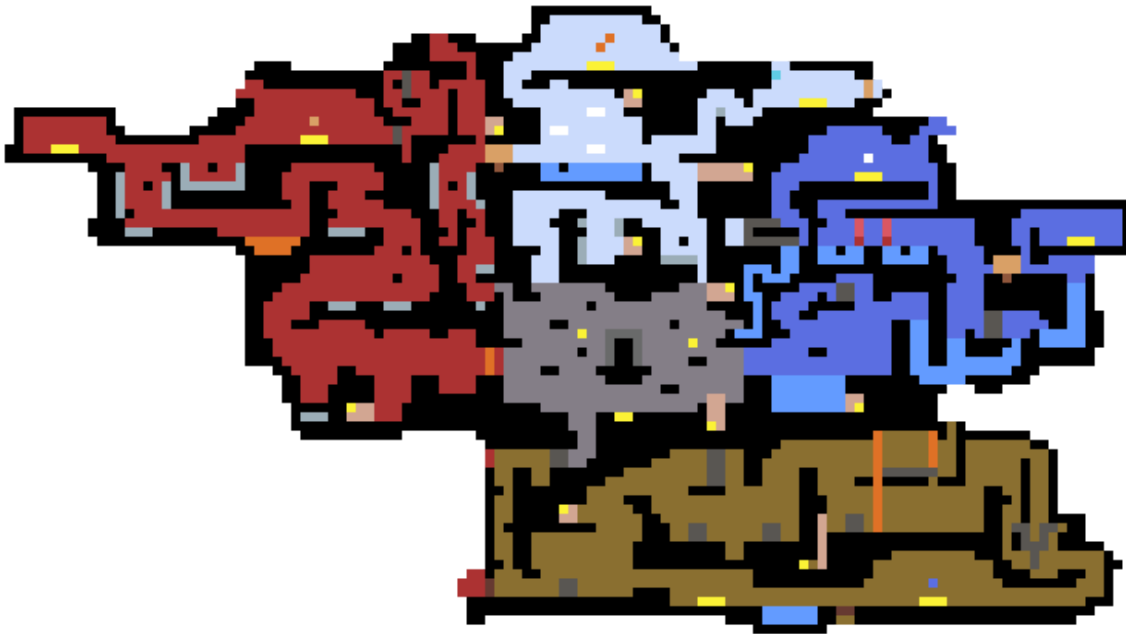
The center acts as the hub which connects all 4 sections via the center room. The players objective is to progressively reach each power up awarding them with a new ability that will allow them to clear another path. The fire area, being the first to explore, uses classic platformer layouts with the players skills in movability being tested. The power up at the end of this path is the Earth element. Following that is the earth area which makes use of pushable rocks as the core puzzle idea, requiring them to be moved to a certain position to progress. The power up at the end of this path is the Water element. The water elements introduces the swimming ability as the platform style with quick charging between water and other elements to complete goals. The power up at the end of this path is the Air element. The air ability use the wall jump for a more parkour style platformer forcing the player to time perfectly to avoid hazardous spikes. The power up at the end of this path is the ability Fireball. Due to fireball only being unlocked at this point, no enemies appeared in any of these areas.

Fire

The fire area is divided into 2 sections. The first section is accessible after the fireball is unlocked as the vines are now removable. The first section allows the user to unlock the ability Groundpound. The puzzles in the first section are a lot of spike platforms and lava platforms as well as the introduction of enemies. The second section is actually also accessible after the fireball is unlocked as the invisible tiles are still usable without being scene meaning the player can continually move on until the Fire Edge and achieve the Eternal Flame. The puzzles are relatively similar to that of the previous section considering no new power is needed to proceed. Alternatively, rather than going to the Fire Edge a fork in the road can also lead the player up to to the final water ability, Bubble. This area is inaccessible until the Dash ability is unlocked. The puzzles make heavy utilization of the dash power as a way to proceed also adding spikes and stationery ranged enemies in both directions.

Earth
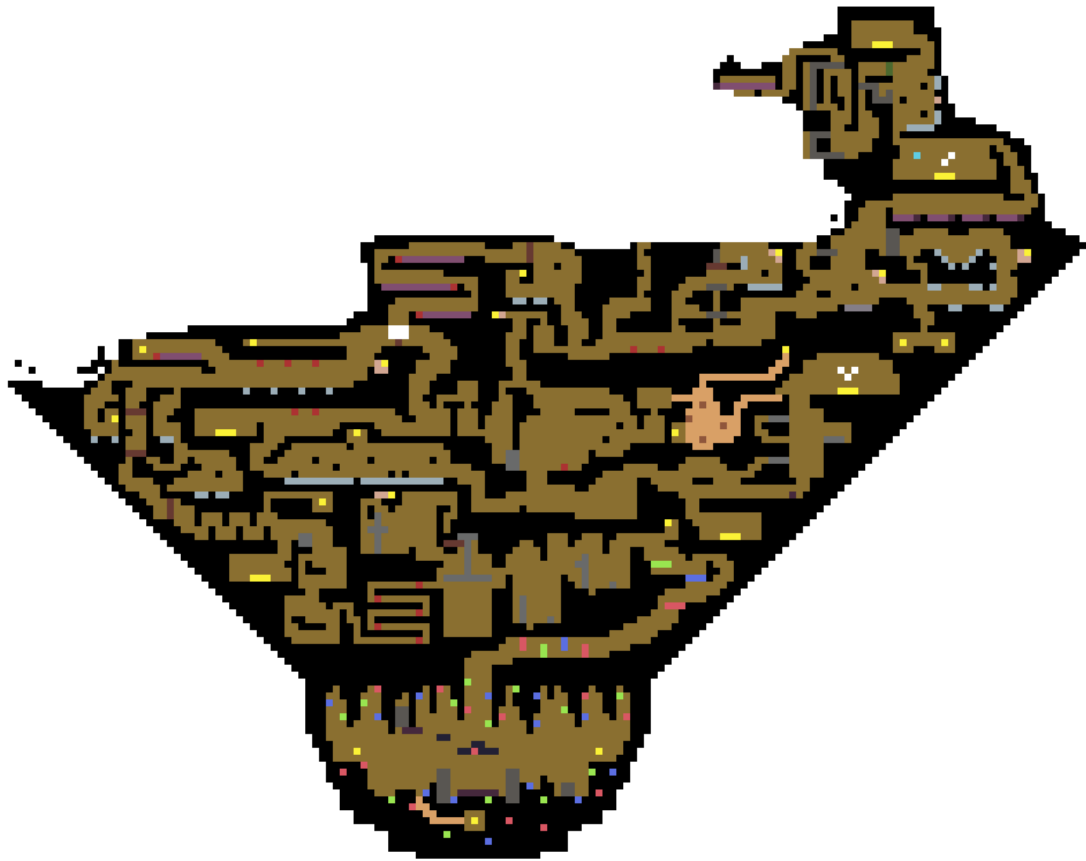
The earth area is divided into 2 sections. The first section is accessible after the groundpound is unlocked as the breakable tiles are now breakable. The first section allows the user to unlock the ability Ghost. The puzzles in the first section continue to make heavy use of pushable rock puzzles attempting to throw in some breakable tiles and enemies to up the difficulty. The second section is actually also accessible after the groundpound is unlocked meaning the player can continually move on until the Earth Edge and achieve the Tree of Wisdom. The puzzles in this are continuing to make heavy use of rock puzzles being the most puzzle oriented section. Alternatively, rather than going to the Earth Edge a fork in the road can also lead the player up to to the final air ability, Highjump. This area is inaccessible until the Dig ability is unlocked. The puzzles in this area are a mix of rock pushing, enemy battling, spike parkour and finally digging.

Air

The air area is
divided into 2 sections. The first section is accessible after the ghost ability is
unlocked due to the invisibile tiles being visible now. In actuality this can be
completed after the groundpound is unlocked since the tiles are always there but
the player would not know on their first run. The first section allows the user to
unlock the ability Frostbreath. The puzzles in the first section are time based using
clouds enemies which become deadly after being stood on for a while as well as
invisible platforms for the player to find. The second section is actually also accessible
after the groundpound is unlocked meaning the player can continually move on
until the Air Edge and achieve the Breath of Life. In reality the player should attempt
this section after getting the ghost ability. In the direction going up to the Air Edge,
the puzzles continue to use clouds making them more skill based and difficult being
the most skill based section. Alternatively, rather than going to the Air Edge a fork in
the road can also lead the player to the final fire ability, Dash. This area is inaccessible
until the Highjump ability is unlocked. The puzzles in this area are a mix of enemy
fighting, high jumping long distances and parkour.

Water
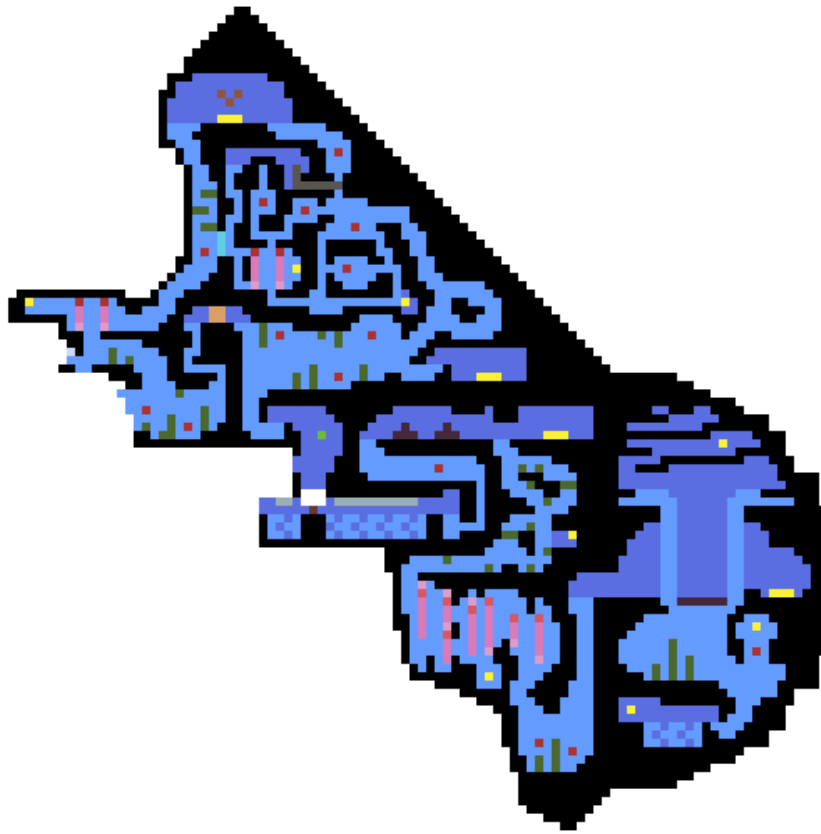
The water area is the only area not split into two sections. Since the frost breath is the last primary ability to unlock once it is gotten from the air area, the player only has to reach every edge or go for the secondary abilities. The water area starts with a fork in the road where the player can go up to get the first secondary ability, the Dig ability. The new sections add enemies in the water as well as fully underwater movement. This makes this area the most different in playstyle with the movement being completely different to other areas. Both directions feature the same puzzles but the second direction leads to the Water Edge. In this area the player can achieve the Mastered Tides. Once the frostbreath is unlocked this whole area is accessible making the Water area the first area which can be fully explored.

General Enemy Rules

Fire
- **Fire-Ant**: Patrol between two points and when player is in range (OnTriggerEnter) it charges towards the player.
- **Phoenix**: Hovers and pushes the player back when they get too close
- **Salamander**: Fires projectile when player is in range

Air
- **Bird**: Vertical patrol, damages when player bumps into it
- **Butterfly**: Hovers and pushes back player when they get too close
- **Cloud**: While standing on it, will deal damage after a set amount of time

Earth
- **Mole:** Damage upon collision
- **Caterpillar**: Patrol between two points and when player is in range (OnTriggerEnter) it charges towards the player.
- **Bug**: Fires a projectile when player is in range

Water
- **Jellyfish**: Damage upon collision of tentacles
- **Pufferfish**: Damage when it puffs up (animation event)
- **Red-Herring**: Chases the player when they come in range.

Bosses

Mother Nature *(Controlled by the Urchin)*: Walks towards player and strikes when player is in range; if player touches the Urchin, they will get damaged.
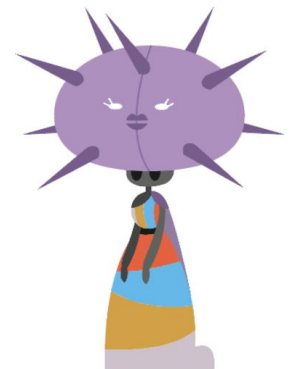
Collectibles

There are 3 types of collectibles that drive the player in the game

The first are coins which are hidden throughout the map either behind walls or in plain sight. These act as a collectors item for player who enjoy 100% completing games as an added incentive besides the main goals

The next are the abilities which are either required to solve puzzles to progress or optional fighting abilities to aid in the final boss.

Lastly are the 4 main artefacts the player needs to retrieve before going to the boss at the beginning of the map.

Music